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| APPLICATION NO. | FILING DATE | | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|------------------------|---------------------|-------------|----------------------|---------------------|------------------|
| 10/629,738 | /629,738 07/30/2003 | | Kouki Takahashi | 1442.1015 | 8907 |
| 21171 | 7590 | 05/27/2004 | | EXAMINER | |
| STAAS & F SUITE 700 | HALSEY | LLP | FERGUSON, MARISSA L | | |
| | ORK AV | /ENUE, N.W. | ART UNIT | PAPER NUMBER | |
| WASHINGT | ON, DC | 20005 | 2854 | | |

DATE MAILED: 05/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | Application No. | Applicant(s) | | | | | |
|--|---|------------------------|---|---------------------|--|--|--|--|
| | | 10/629,738 | TAKAHASHI, KC | TAKAHASHI, KOUKI | | | | |
| | Office Action Summary | Examiner | Art Unit | | | | | |
| | | Marissa L Ferguson | 2854 | 800 | | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | | | | | | | |
| Status | | | | | | | | |
| 1)⊠ | Responsive to communication(s) filed on 15 S | September 2003. | | | | | | |
| 2a)□ | This action is FINAL . 2b)⊠ This | s action is non-final. | | ٠. | | | | |
| 3)□ | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | | | |
| Disposition of Claims | | | | | | | | |
| 5)□ 6)⊠ | Claim(s) 1-8 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. Claim(s) 1-8 is/are rejected. Claim(s) is/are objected to. | | | | | | | |
| Applicati | ion Papers | | | | | | | |
| 9)[| The specification is objected to by the Examine | er. | | | | | | |
| 10)🖂 | 10)⊠ The drawing(s) filed on <u>30 July 2003</u> is/are: a)⊠ accepted or b) objected to by the Examiner. | | | | | | | |
| | Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | | | |
| Priority u | ınder 35 U.S.C. § 119 | | | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | | | |
| Attachmen | | _ | | | | | | |
| 2) Notice 3) Inform | te of References Cited (PTO-892) te of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) or No(s)/Mail Date 9/15/03. | | mary (PTO-413) lail Date mal Patent Application (PT | ⁻ O-152) | | | | |

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DETAILED ACTION

Drawings

- 1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: elements 502a,121 and 614. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
- 2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: element 502b. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Takashi (JP 2000-348562).

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Regarding claim 1, Takashi teaches a plurality of keys (1) for entering information, a moving mechanism for descending and ascending each key in a direction different from a vertical direction and for maintaining an orientation of the key top (Figures 1-4) and a forcing member (4) for forcing said moving mechanism to return the key to an original state.

Regarding claim 2, Takashi teaches a moving mechanism that includes first (1a,2) and second members (1b,3), rotatably provided on a base that is fixed relative to the key, for supporting the key (Page 4, Paragraph 0026, Lines 7-9) and a coupling member (2b,3b) for connecting the first and second members to each other and for synchronizing movements of the first and second members (Page 4, Paragraph 0027).

Regarding claim 3, Takashi teaches wherein said first and second members have U-shapes (Figures 1 and 6) whose openings face each other, and said forcing member is located between the first and second members and made of an elastic member (Figures 1 and 6, Page 4, Paragraph 0029).

Regarding claim 4, Takashi teaches wherein the first and second members support the key at four points and said coupling member synchronizes (Figures 1 and 6, elements 1a,1b).

Regarding claim 5, Takashi teaches wherein said moving mechanism includes a rotary mechanism (2,2f,3,3f,22) that rotates around a base fixed relative to the key (Page 4, Paragraph 0026, Lines 7-9, Page 5, Paragraph 0032, Lines 4-8 and Paragraph 0033, Lines 6-10), said keyboard further comprising a stopper (7a,22g) for

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restricting a rotary angle of said moving mechanism so that the rotary angle of the moving mechanism may fall within a present range (Page 6, Paragraph 0043-0044).

Regarding claim 6, Takashi teaches wherein said moving mechanism includes a rotary mechanism that rotates around a base fixed relative to the key so that the key top may approach to a user (Page 4, Paragraph 0026, Lines 7-9, Page 5, Paragraph 0032-0033, Lines 6-10).

Regarding claim 7, Takashi teaches wherein said forcing member is a hollow elastic member (element 4, Page 4, Paragraph 0029), said keyboard further comprising, in a hollow part in the elastic member, a projection part (5,5a) for transmitting information on keying to a switch part (6,6a) for recognizing the keying (Page 5, Paragraph 0035).

Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over unpatentable over Takashi (JP 2000-348562) in view of Sato et al. (US Patent 6,371,671).

Takashi teaches the invention claimed, however he does not explicitly disclose a display part for displaying information input from said keyboard. Sato et al. discloses a keyboard with key switch device that teaches a display means (103 and Figure 24A).

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It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the invention taught by Takashi to include a display as taught by Sato et al., since Sato et al. teaches that it is advantageous to provide a means for displaying letters, symbols, numbers and other pertinent information.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marissa L Ferguson whose telephone number is (571) 272-2163. The examiner can normally be reached on (M-T) 6:30am-4:00pm and every other(F) 7:30am-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld can be reached on (571) 272-2168. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

> Marissa L Ferguson Examiner

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ANDREW H. HIRSHFELD SUPERVISORY PATENT EXAMINER **TECHNOLOGY CENTER 2800**